

WE CLAIM:

1 1. A system for transmitting messages between a platform domain and an
2 application domain for a product, the system comprising:
3 a platform domain having a software component and an interface component, the
4 interface component having at least one interface for providing an application or a module in
5 the application domain with access to the software component, and a message transmitting
6 mechanism for transmitting messages between the platform domain and the application
7 domain via the interface; the message transmitting mechanism including:
8 a message model for allowing an application or another module in the
9 application domain to select or switch between either a callback mode or a full message mode
10 for receiving messages from the platform domain; and
11 a message handler for routing messaging according to the selected mode.

1 2. The system according to claim 1, wherein the message handler is included in
2 the platform domain.

1 3. The system according to claim 2, wherein:
2 the interface comprises a middleware services layer; and
3 the message handler comprises a Native Application Core module that acts as a router
4 included in the middleware services layer.

1 4. The system according to claim 3, wherein the Native Application Core module
2 is included in an Open Platform API (OPA) domain of the middleware services layer.

1 5. The system according to claim 1, wherein support for the message model is
2 included in the platform domain and controlled by the modules in the application domain.

1 6. The system according to claim 1, wherein, if the callback mode is selected, the
2 callback mode is entered by the application returning execution control to the message
3 handler after the invocation of a callback function/procedure/method.

1 7. The system according to claim 1, wherein if the full message mode is selected,
2 the full message mode is entered by the application keeping the execution control after the
3 invocation of a callback function/procedure/method and polling the message handler for
4 queued messages.

1 8. The system according to claim 1, wherein the application or the module in the
2 application domain may change or switch between the callback mode and the full message
3 mode at any time.
4

5 9. The system according to claim 1, wherein the platform domain comprises a
6 platform for a mobile terminal for a wireless telecommunications system.

1 10. A method of transmitting messages between an application domain and a
2 platform domain, the platform domain having a software component and an interface
3 component having at least one interface for providing an application or a module in the
4 application domain with access to the software component, the method comprising:
5 the application or the module in the application domain selecting either a callback
6 mode or a full message mode or switching between the callback mode and the full message
7 mode, the modes being for receiving messages from the platform domain; and
8 a message handler routing messaging according to the selected mode.

1 11. The method according to claim 10, wherein, if the callback mode is selected,
2 the method further includes the step of entering the callback mode by the application
3 returning execution control to the message handler after the invocation of a callback
4 function/procedure/method.

1 12. The method according to claim 10, wherein if the full message mode is
2 selected, the method further includes the step of entering the full message mode by the
3 application keeping the execution control after the invocation of a callback
4 function/procedure/method and polling the message handler for queued messages.

1 13. The method according to claim 10, further including the step of the application
2 or the module in the application domain switching between the callback mode and the full
3 message mode at any time.

1 14. The method according to claim 10, wherein the platform domain comprises a
2 platform for a mobile terminal for a wireless telecommunications system.

1 15. A message transmitting mechanism for transmitting messages between first
2 and second software components, the message transmitting mechanism comprising:
3 a message model for allowing one of the first and second software components to
4 select either a callback mode or a full message mode or switch between the callback mode
5 and the full message mode, the modes being for receiving messages between the first and
6 second software components; and
7 a message handler for routing messaging according to the selected mode.

1 16. The mechanism according to claim 15, wherein the second software
2 component is in a platform domain that includes an interface component comprising an
3 interface for providing the first software component with access to the second software
4 component, and wherein the message handler is included in the interface component.

1 17. The mechanism according to claim 16, wherein:
2 the interface component comprises a middleware services layer;
3 the message handler comprises a Native Application Core module included in the
4 middleware services layer; and
5 the Native Application Core module is adapted to act as a router.

1 18. The mechanism according to claim 17, wherein the Native Application Core
2 module is included in an Open Platform API (OPA) domain of the middleware services layer.

1 19. The mechanism according to claim 15, wherein support for the message model
2 is included in the platform domain and controlled by the modules in the application domain.

1 20. The mechanism according to claim 15, wherein, if the callback mode is
2 selected, the callback mode is entered by the application returning execution control to the
3 message handler after the invocation of a callback function/procedure/method.

1 21. The mechanism according to claim 15, wherein if the full message mode is
2 selected, the full message mode is entered by the application keeping the execution control
3 after the invocation of a callback function/procedure/method and polling the message handler
4 for queued messages.

1 22. The mechanism according to claim 15, wherein the application may switch
2 between the callback mode and the full message mode at any time

1 23. The mechanism according to claim 16, wherein the platform domain
2 comprises a platform for a mobile terminal for a wireless telecommunications system.